

Welcome to the FCC Delegation

We are delighted to welcome our invited guests from the US FCC staff:

- John Leibovitz Deputy Chief, Wireless Bureau
- Brian Regan Legal Advisor, Wireless Bureau
- Paul Powell Attorney Advisor, Wireless Bureau, Mobility Division
- Robert Pavlak Engineer, Office of Engineering and Technology
- Kamran Etemad Engineer, Wireless Bureau, Mobility Division



Ground Rules

- Opportunity for the WiMAX Forum Board, and its members, to share its vision and concerns regarding the ongoing FCC proceeding on "Enabling Innovative Small Cell Use in 3.5 GHz Band", which proposes to create a new Citizens Broadband Service in the 3.55-3.65 GHz band (and possibly 3.65-3.70 GHz as well).
- The FCC has received many comments on this topic, including comments from the WiMAX Forum in February.
- The meeting takes place under the FCC's ex parte rules; the WiMAX Forum must file a subsequent report to the FCC listing the meeting attendance and summarizing the data presented and arguments made, attaching any documents presented.



Agenda

- Review of WiMAX Forum comments of 20 February 2013.
- Additional comments of participants.



Background

- The WiMAX Forum submitted comments on 20 February 2013 regarding the December 2012 NPRM proposing the creation of a new Citizens Broadband Service ("CBS") sharing the 3550-3650 MHz band with incumbent users, with a supplementary proposal to incorporate the 3650-3700 MHz band under the new regulatory regime.
 - GN Docket No. 12-354
 - http://apps.fcc.gov/ecfs/document/view?id=7022123471
- This presentation summarizes those views; see the filing to resolve ambiguities.



Summary

- We endorse the proposed Citizens Broadband Service in the 3.55-3.65 GHz band, with appropriate regulatory support to allow that service to flourish.
- We endorse the supplementary proposal to include the 3.65-3.70 GHz band into the new proposed regulatory regime, incorporating opportunities to support the backhaul of fixed and nomadic small cells.



Need for Small Cell Backhaul

- High-capacity small-cell deployments demand distributed high-capacity backhaul. To provide efficient service, small cells must be located according to capacity demands, not only according to wireline backhaul availability.
- Since fixed/nomadic wireless technology is well suited to providing distributed backhaul, and since mobile spectrum is best used for access rather than for backhaul, we urge the Commission to consider fixed/nomadic backhaul spectrum as a critical element of the small-cell deployment scenario.



Restrictions in 3.65-3.70 GHz

- WiMAX technologies have been widely deployed in the 3.65-3.70 GHz band; such deployments have been restrained by regulatory limitations.
- Deployment of equipment is significantly restrained by excessive 150 km exclusion zones surrounding grandfathered FSS earth stations FSS earth stations
- Deployment is also hampered by failure to account for the fact that WiMAX subscriber stations are "subsidiary" stations (that is, stations under control of a base station).



Subsidiary Stations in 3.65-3.70 GHz

- In 3.65-3.70 GHz band, fixed subscriber stations are subject to the same requirements as base stations, including the requirement that the subscriber station be registered in the FCC's public Universal Licensing System (ULS).
- This is a major administrative burden.
- This also interferes with the demands of the operator and the subscriber to maintain privacy regarding subscription services provided to private addresses.
- We urge the end to ULS registration for all "subsidiary" stations (that is, user stations that operate under control of a base station).



Spectrum Access System (SAS)

- We support the proposal to enable sharing based on a spectrum access system (SAS) incorporating a dynamic geolocation database.
- Subsidiary stations should not be required to communicate directly with the SAS if they operate under the control of a base station that communicates with the SAS directly or indirectly.
 - For example, an LTE handset may operate under the control of an LTE small cell base station controlling its transmission. If the BS is controlled (directly or indirectly) by the SAS, then the handset should not be required to directly access or respond to the SAS.



A 3.55-3.7 GHz Regime

- We generally support the NPRM's "Supplemental Proposal to Include the 3650-3700 MHz Band"
- We recommend a three-year transition period for 3.65-3.70 GHz.
- If the Citizens Broadband Service emerges under the proposed three-tier shared access model, then backhaul of small cells should be granted Priority Access status in the 3.65-3.70 GHz.

